

**THE INFLUENZA-PNEUMONIA EPIDEMIC AT CAMP DODGE,
IOWA, 1918.**

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So much has already been written and spoken on the manifestations of the recent pandemic, and there has been such marked agreement on the general features as shown by reports from the various cantonments and civil centers, that more than a cursory comment on those features would be superfluous. The coming and the going were startling in their suddenness; the numbers attacked were overwhelming; the ravages of the disease shown by the blue faces and labored breathing, and the deaths so sudden and numerous, that many exclaimed, "This is the plague!" The revelations of the tissue damage at the autopsy table were convincing that once the disease invaded the body to any depth, drugs could have but little effect.

Knowing the epidemic was ravaging other cantonments and civil communities, the medical officers of Camp Dodge were on the lookout for cases of the disease, isolating by cubicle all persons with respiratory infections and culturing particularly for the *Bacillus influenzae*. This did not appear to be of great value, as throat cultures of many patients previous to that time had shown that organism. The convincing proof that we were invaded came from the rapid increase of admissions. The hospital population had been running unusually low, around 1200, with a total daily admission rate of 40 to 50. The first reported influenzas were on September 22, 1918. The admissions ran up rapidly, 240, 411, etc., three days showing over 1000, the maximum being attained October 4, 1918 (1275), and fell as rapidly, so that on October 19 there were but 28. The maximum number of all classes of disease (all other classes being cut to minimum, possibly 300 to 400) occupying beds on one day was 8000 on October 8. The total deaths to November 1 was 702. The highest death-rate (82) occurred on October 12.

The bedding of the hospital normally, according to the number designated per ward, which varied from time to time, was 2000 to

This method was used at first on desperate cases only and, judging by them, the results were not encouraging. In a series of 14 cases in which the serum was given as soon as practicable after the diagnosis of influenza-pneumonia was made but one died and the courses of the others were short.

The fact that many apparently desperate cases under symptomatic or digitalis therapy had crises or sudden changes for the better made it difficult to properly value the intravenous methods.

Vaccines: The army influenza vaccine had not reached us at the time of the epidemic. Sherman's No. 38 mixed vaccine was used in the treatment of a limited number of cases and was believed by Major Arthur Dare, who directed its use, to be of benefit. A similar mixed commercial vaccine was used on several hundred influenza cases in the hope of preventing the pneumonia sequel, but the burden of work prevented careful statistical study, and the consensus of opinion was that no demonstrable benefit resulted.

It is agreed by all that absolute rest in bed, fresh air, plentiful use of water and nourishing, simple diet are the essentials of treatment. Those on porches did better than those in wards; patients who had been on porches and moved in asked to be taken out again. Great caution should be used in letting patients up or undertaking work, as myocardial weakness often results. It was deemed wise to hold the patients in the hospital until the blood count fell to 10,000, as higher counts had indicated pus in some cases, which it was not possible to diagnose until a considerable time had elapsed.

Our judgment, based on our experience, is that the problem for the future is the discovery of some agent, along serum or vaccine lines, for the treatment and more particularly the prevention of the infection. Preceding this the offending organism must be identified definitely, as we believe now is not the case.

LABORATORY REPORT ON EPIDEMIC PNEUMONIA,

CAMP DODGE, IOWA.

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DURING the week preceding the sudden appearance of the epidemic of September 28, 1918, three distinct outbreaks of an infectious nature occurred in widely separated sections of the Base Hospital at Camp Dodge. Pharyngeal cultures from these cases showed *Streptococcus hemolyticus* and *Bacillus influenzae* present in unusually large numbers. Admissions during this period increased moderately in number and an unmistakable but not alarming number of acute nasorespiratory disturbances, not unlike similar clinical conditions of the preceding month, gave warning of impending trouble.